GLASSFIRE

SERRAMENTI VETRATI TAGLIAFUOCO

GlassFloor Horizontal REI60

SAFETY

Our range of products includes a glass floor covered by REI 60 fire rating no. LZP01-2326/16/Z00NZP.
Fire resistance tests of the REI 60 type glass floor was carried out at the Fire Testing Laboratory of the Building Research Institute by a body accredited by the Polish Centre for Accreditation no. AB 023.

EUROPEAN CLASSIFICATION

The glass design ensures fire integrity and protection against flames and fumes.

E FIRE INTEGRITY

The glass design ensures fire integrity and protection against flames and fumes, as well as partial thermal insulation; max thermal radiation value is 15kW/m².

EW FIRE INTEGRITY AND RADIATION REDUCTION

The glass design ensures fire integrity and protection against flames, fumes and increased thermal insulation; a temperature increase was limited to 140 K; max temperature increase – 180 in a given point.

EI FIRE INTEGRITY AND THERMAL INSULATION

R LOAD COEFFICIENT

FIRE RATED GLASS OPERATING PRINCIPLE

First, fire causes cracking to the external glass unit at stress spots.

The layer of nanogel expands forming a protective insulating layer.

The formed protective layer stops an increase of the glass surface temperature.

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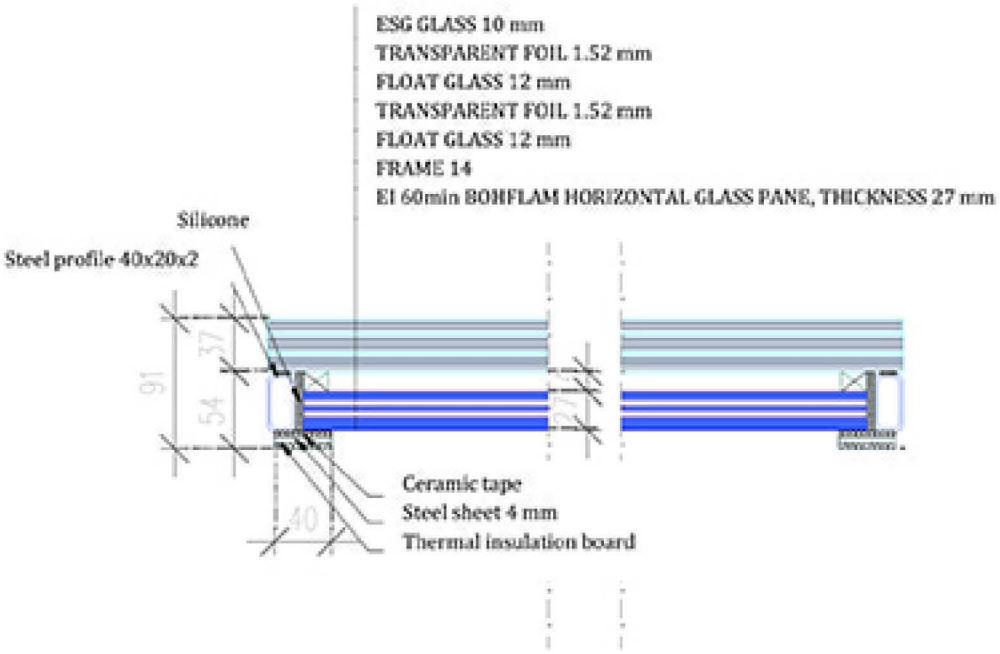
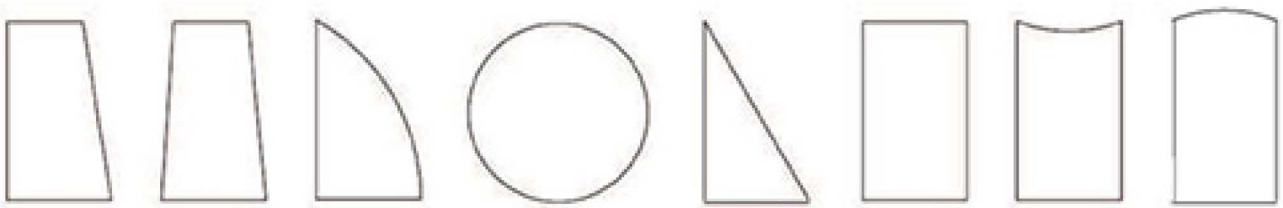
PANEL SECTION

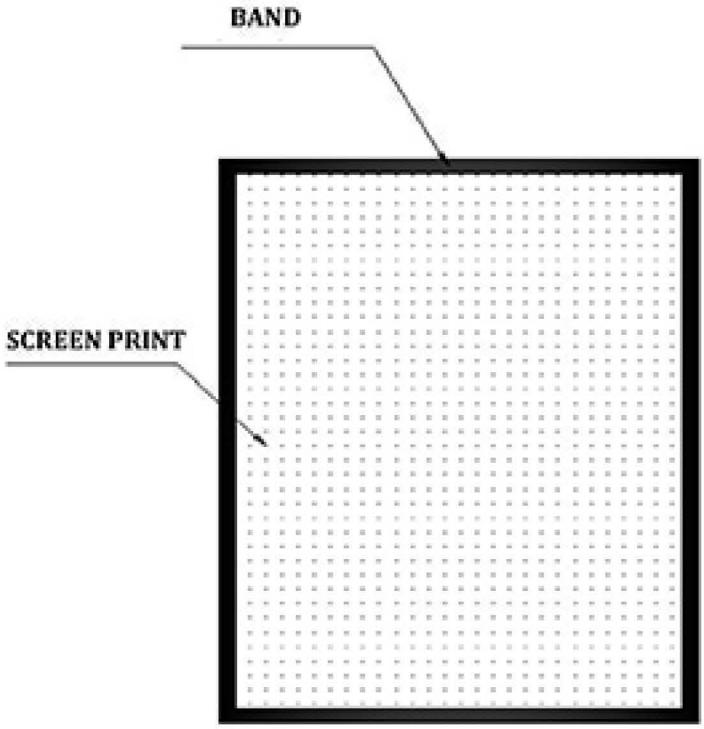
The panel is designed as a steel-glass floor component ready to be arranged on a sub-structure.



EXAMPLES OF SHAPES



PANEL TOP VIEW



SCREEN PRINTS

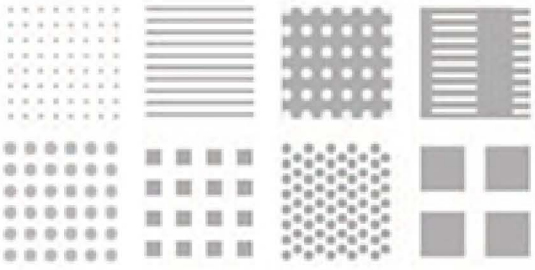
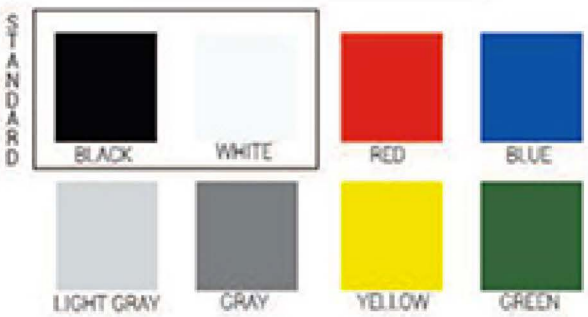
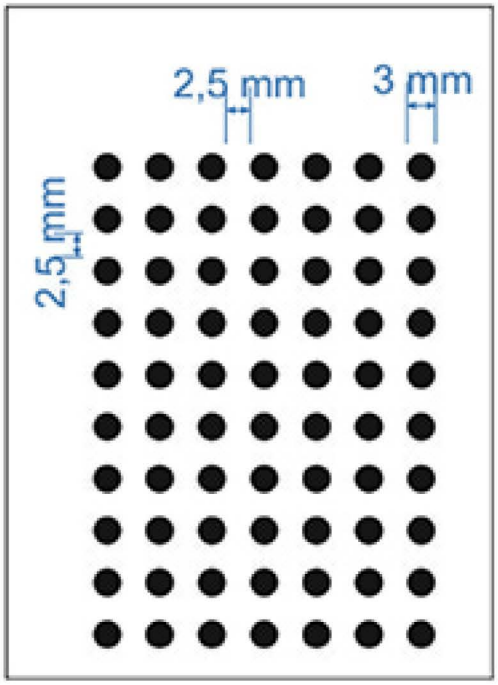


TABLE OF COLOURS - BANDS

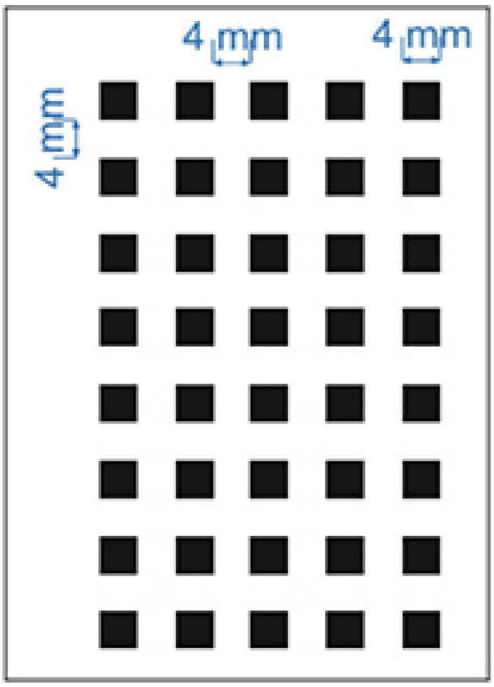


Anti-slip screen print, class R10 as per DIN 51130

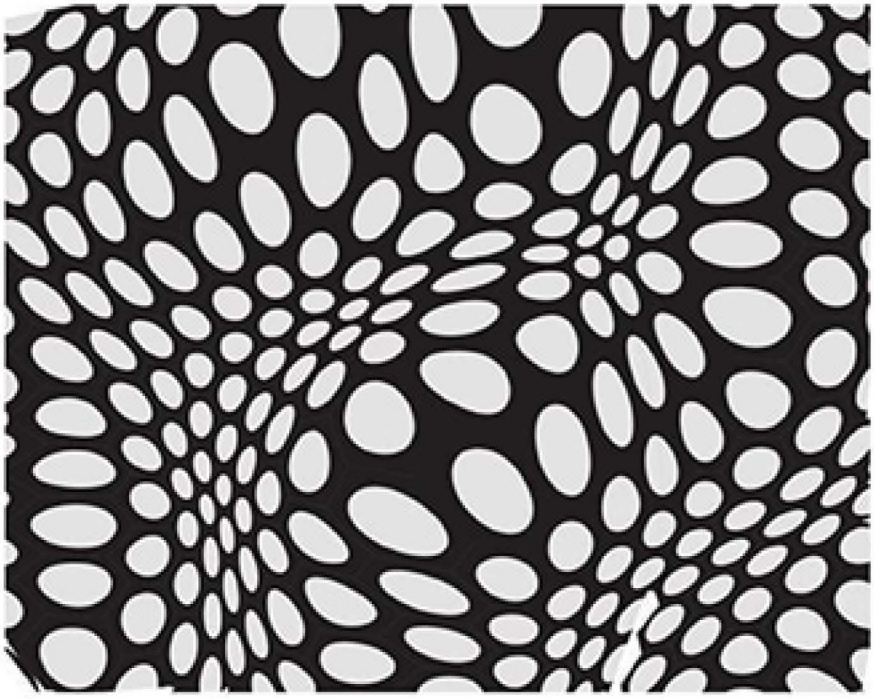
TD P 40 pattern



TD Q 68 pattern

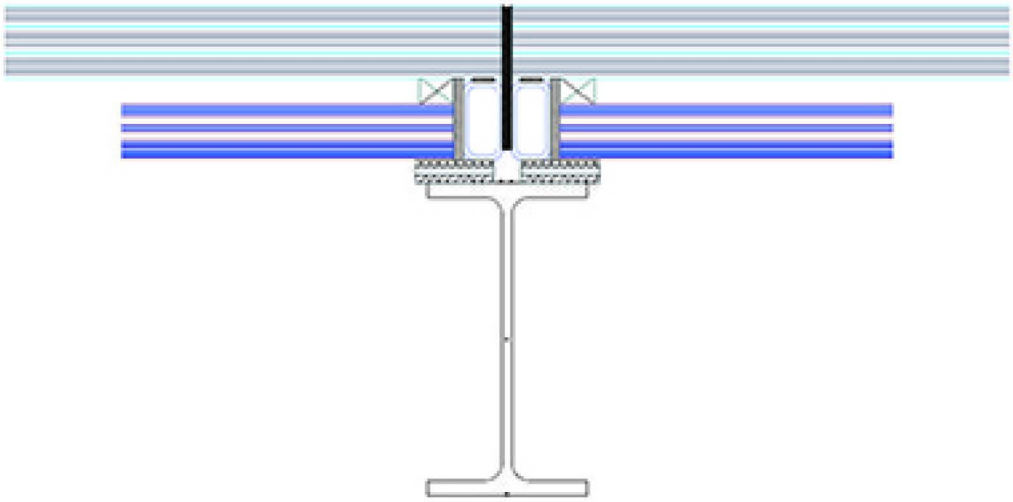


Digital ceramic print up to 720 dpi

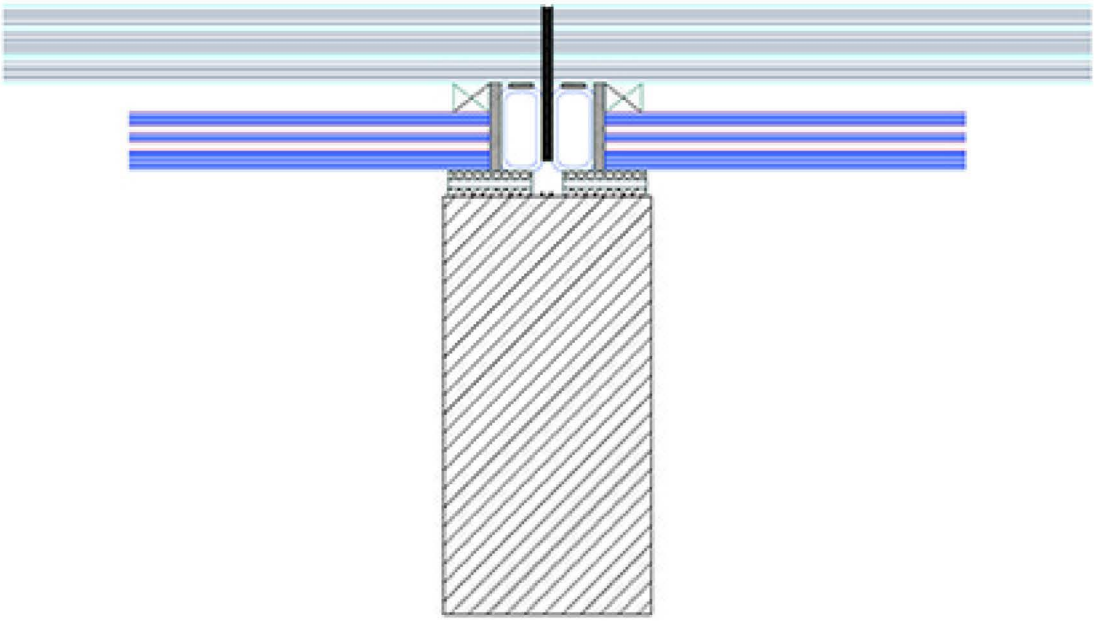


EXAMPLES OF ASSEMBLY METHODS

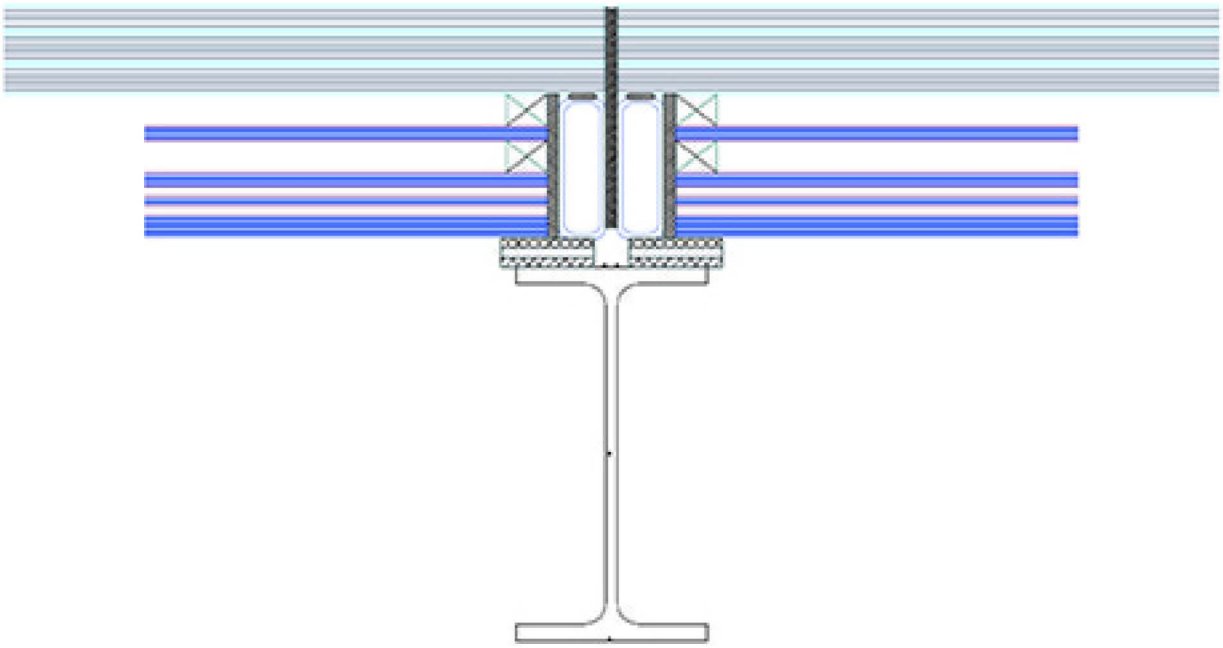
- **REI 60 SINGLE CHAMBER GLASS FLOOR BASED ON A STEEL GRATE**



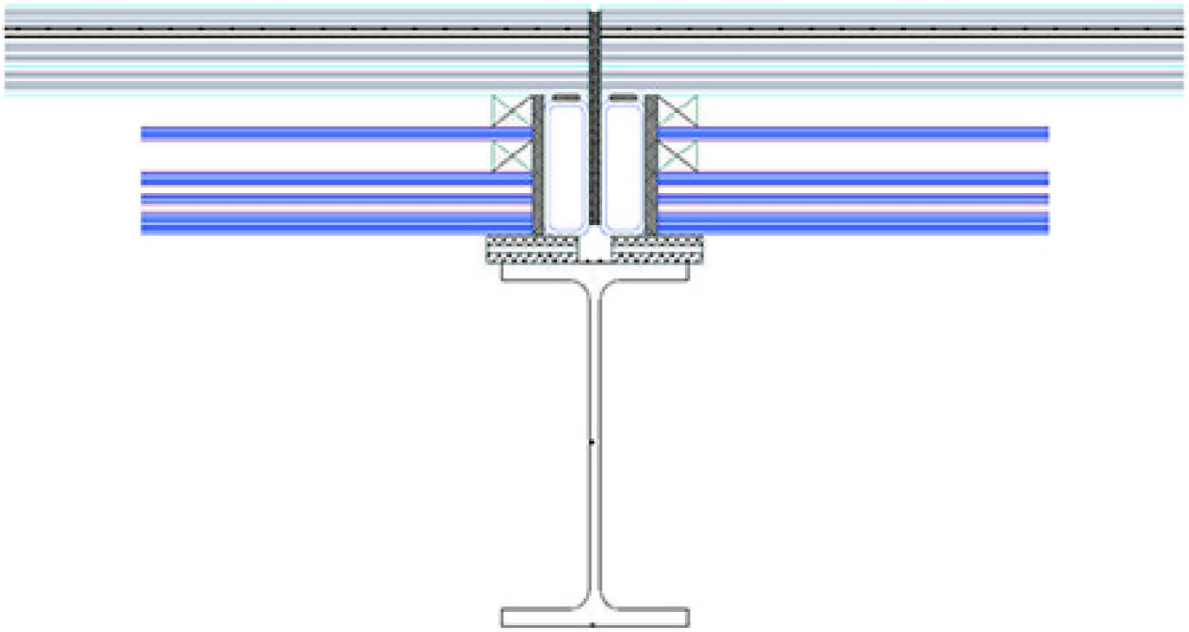
- **REI 60 SINGLE CHAMBER GLASS FLOOR BASED ON CONCRETE**



➢ E60 DOUBLE CHAMBER GLASS FLOOR

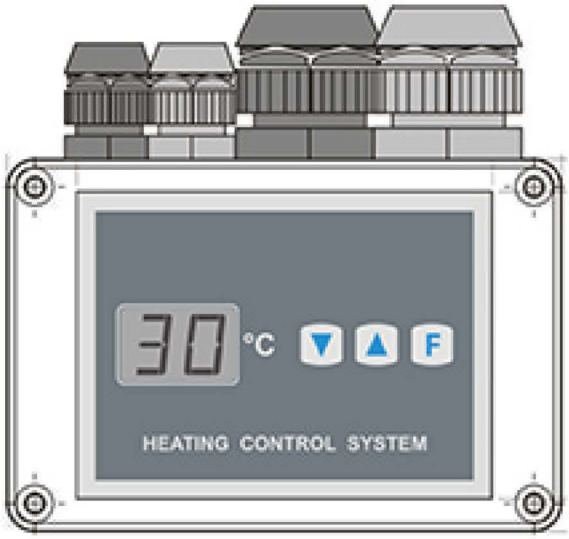


➢ REI 60 DOUBLE CHAMBER GLASS FLOOR – HEATING FLOOR

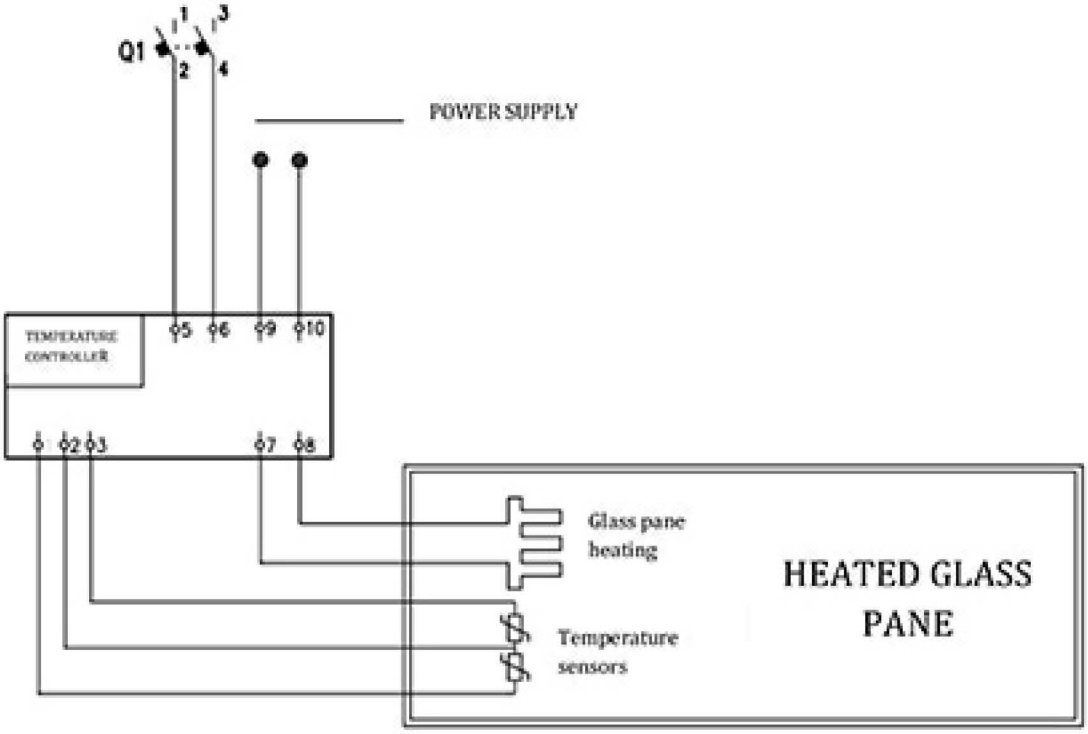


Heated glass panes can be used to melt snow and ice and prevent condensation of water on glass panes.

Heated glass controller:

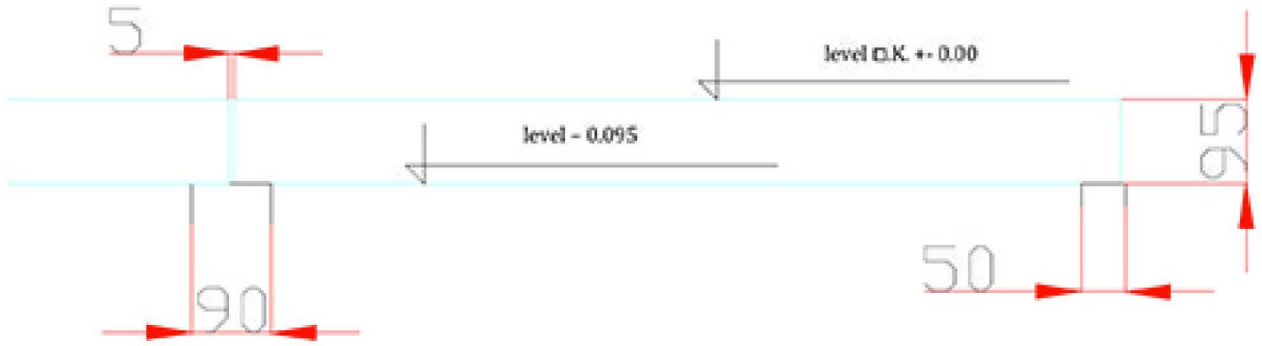


Connection diagram:



REI 60 FLOOR TECHNICAL SHEET

Technical requirements for a sub-structure according to the classification of glass floors.



support for two packets - 90 mm peripheral support - 50 mm
sub-structure level after providing it with fire protection - 0.095 from O.K.

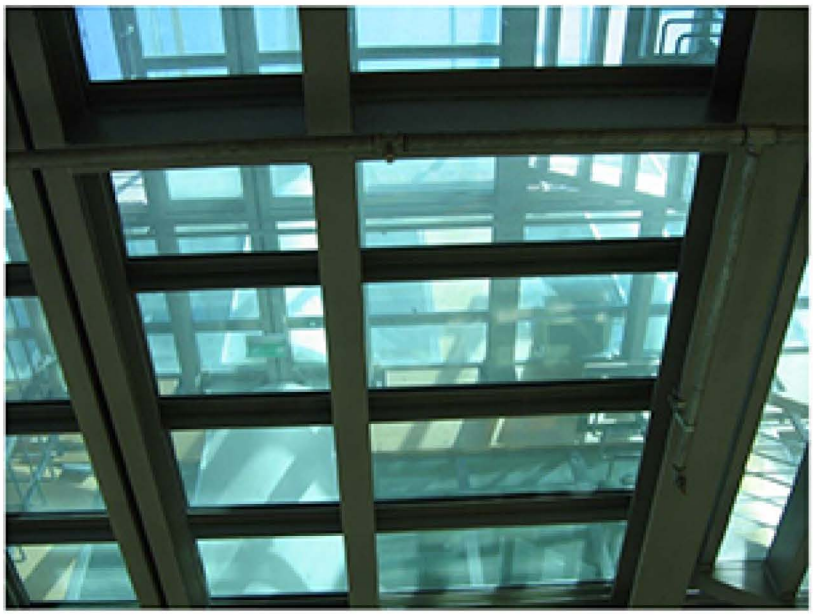
1. The supportive structure of glass panels designed as a steel grate made of rolled profiles of grate component connection – welded.
2. Max design bending of the grate under normal conditions is fk ≤ L/268.
3. Bending stress of beams under normal conditions is α_M< 49%.
4. Fire protection of the grate steel structure is provided in class R60 for critical temperature of steel θkr = 350 °C.
5. Max characteristic service load of the floor under normal conditions is qk ≤ 5.00 kN/m²
6. Max panel dimensions: 2300 x 1200 mm.
7. Max dimensions of the panel with steps: 2700 x 1600 mm (size of top glass panes).

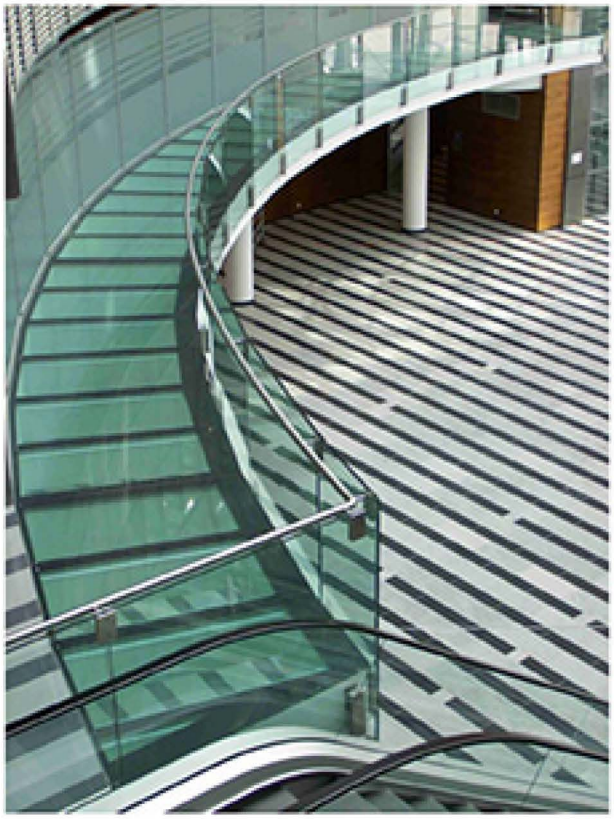
REFERENCE STANDARDS

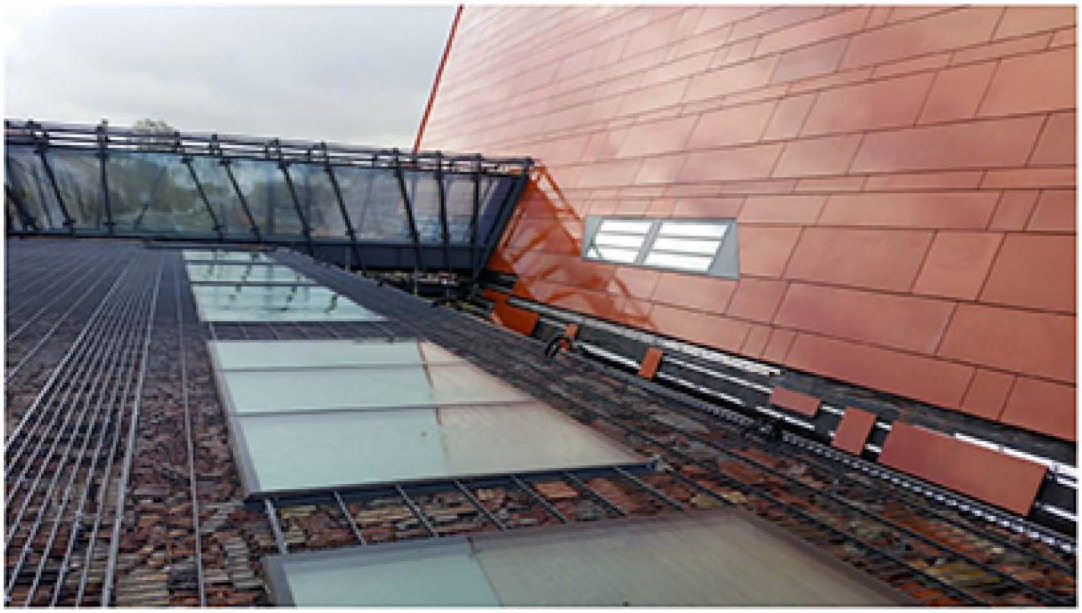
1. PN-EN 1365-2:2014-12. *Fire resistance tests of load-bearing components. Part 2: Ceilings and roofs.*
2. PN-EN 13501-2: 2016-07. *Fire classification of construction products and building elements. Part 2: Classification using data from fire resistance tests, excluding ventilation systems.*
3. PN-EN 1993-1-2: 2005. *Design of steel structures. Parts 1-2: General rules – Structural fire design.*
4. *Report no. LZP01-2326/16/Z00NZP on fire resistance tests.*

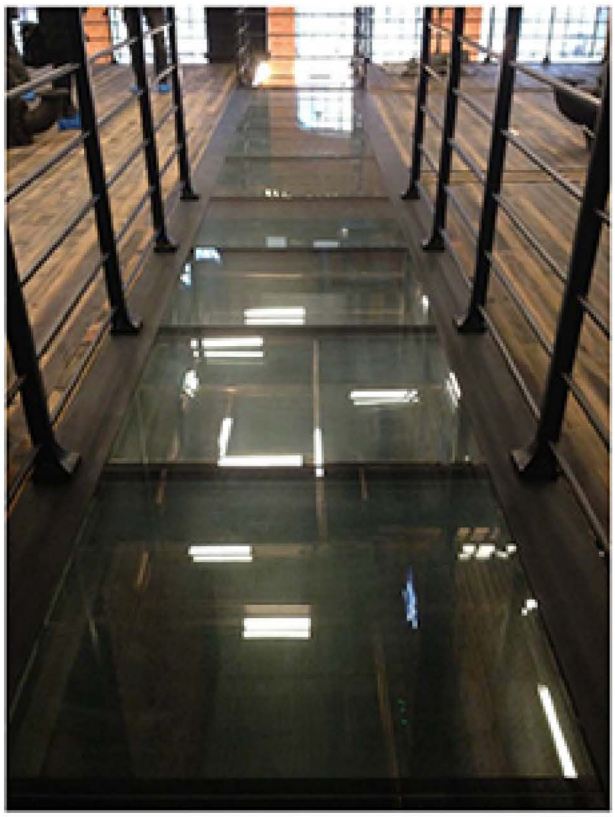
OUR PROJECTS

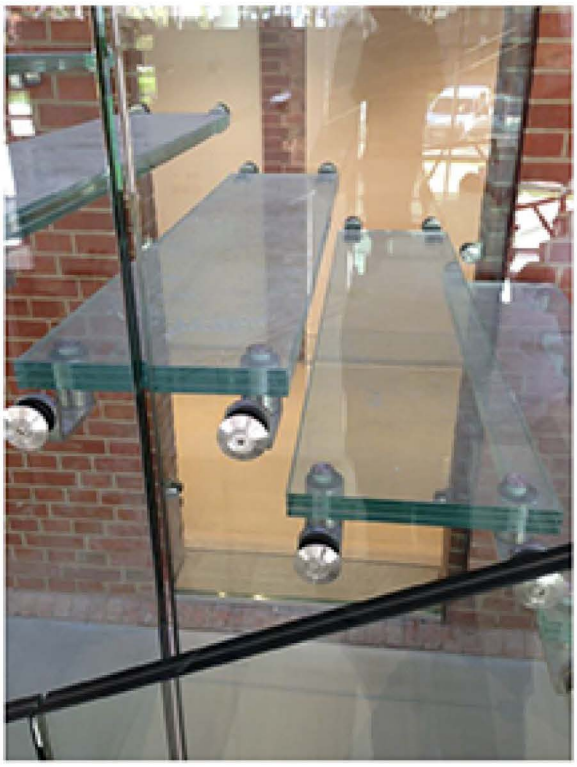
- **FIRE TESTING – 2018**











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